FIG.1(a)

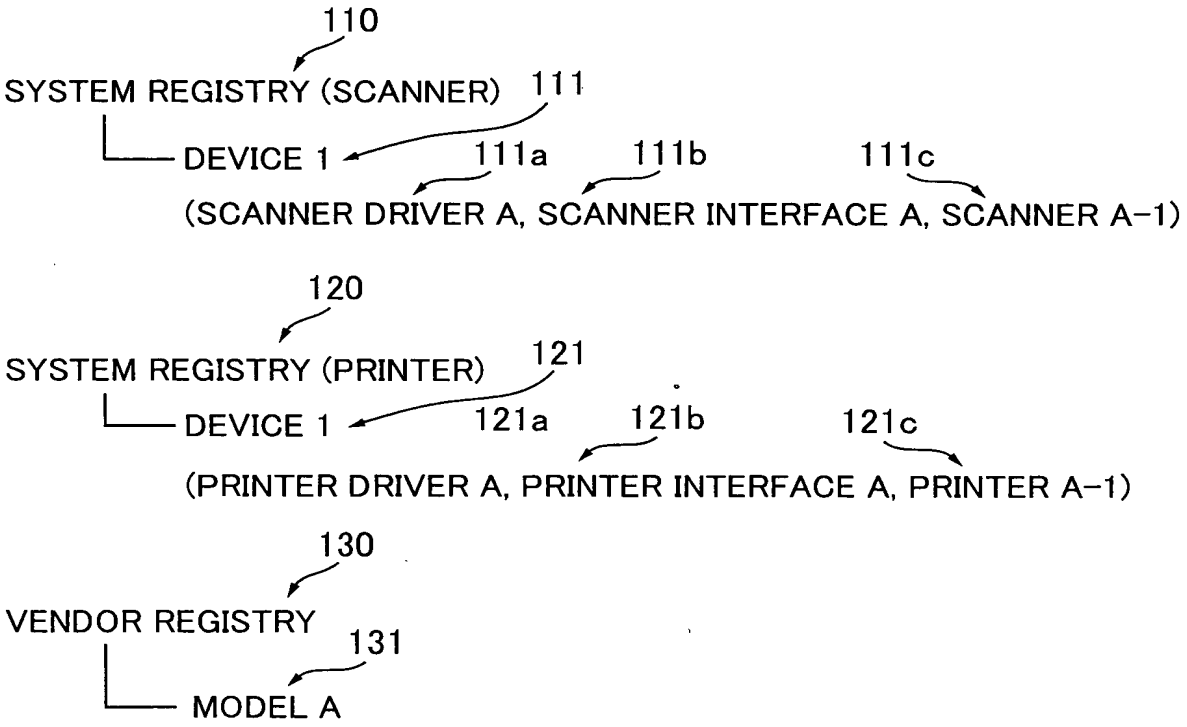
110
SYSTEM REGISTRY (SCANNER)
111
DEVICE 1
111a
111b
111c
(SCANNER DRIVER A, SCANNER INTERFACE A, SCANNER A-1)
120
SYSTEM REGISTRY (PRINTER)
121
DEVICE 1
121a
121b
121c
(PRINTER DRIVER A, PRINTER INTERFACE A, PRINTER A-1)
130
VENDOR REGISTRY
131
MODEL A

FIG.1(b)

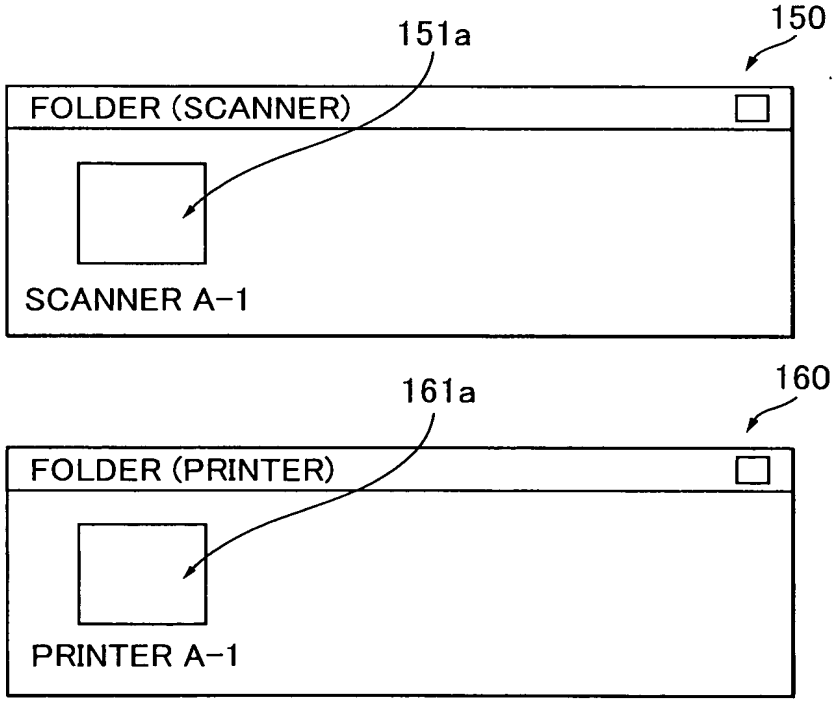
151a
150
FOLDER (SCANNER)
SCANNER A-1
161a
160
FOLDER (PRINTER)
PRINTER A-1

FIG.2(a)

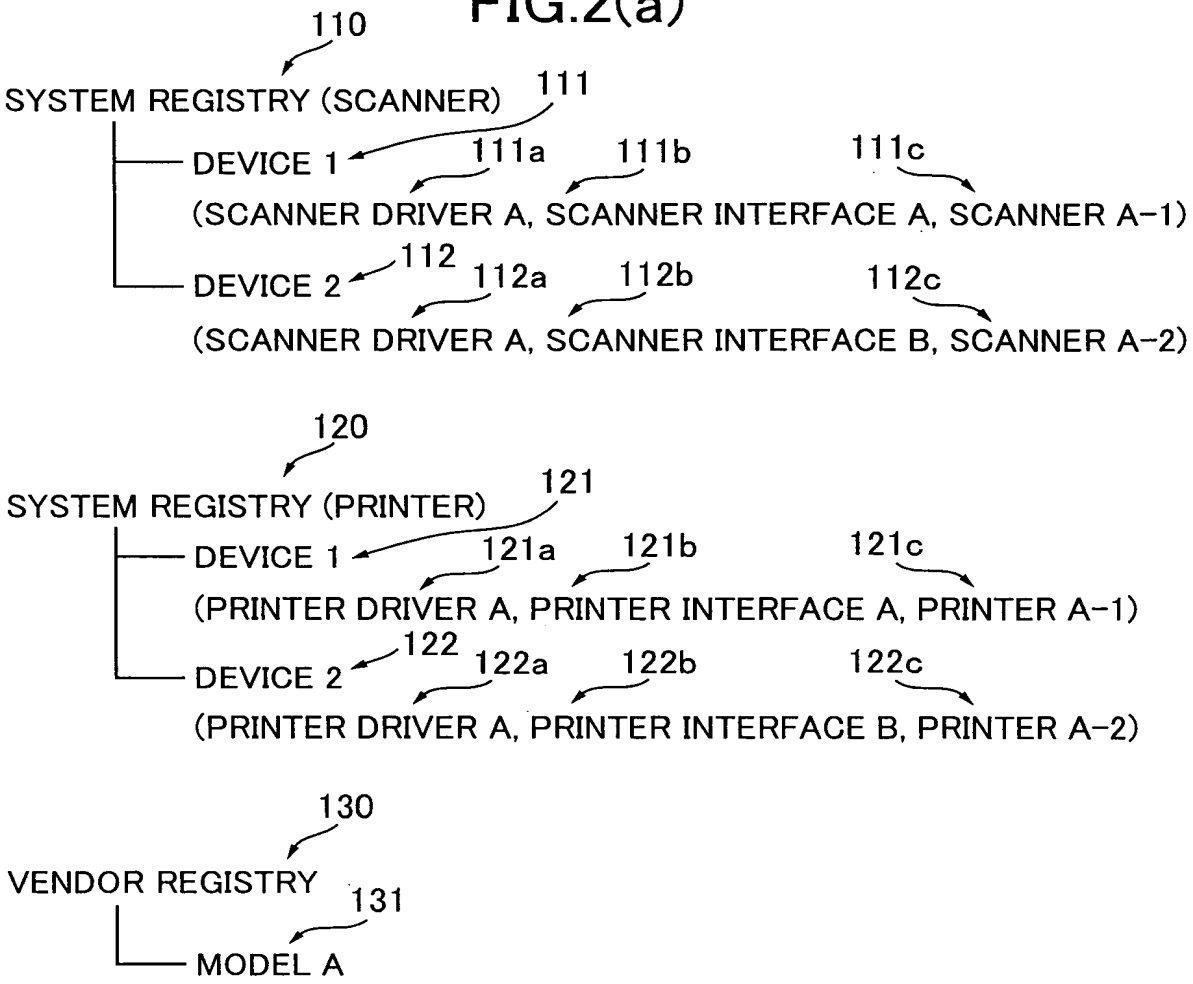
110
SYSTEM REGISTRY (SCANNER)
111
DEVICE 1
111a
111b
111c
(SCANNER DRIVER A, SCANNER INTERFACE A, SCANNER A-1)
112
DEVICE 2
112a
112b
112c
(SCANNER DRIVER A, SCANNER INTERFACE B, SCANNER A-2)
120
SYSTEM REGISTRY (PRINTER)
121
DEVICE 1
121a
121b
121c
(PRINTER DRIVER A, PRINTER INTERFACE A, PRINTER A-1)
122
DEVICE 2
122a
122b
122c
(PRINTER DRIVER A, PRINTER INTERFACE B, PRINTER A-2)
130
VENDOR REGISTRY
131
MODEL A

FIG.2(b)

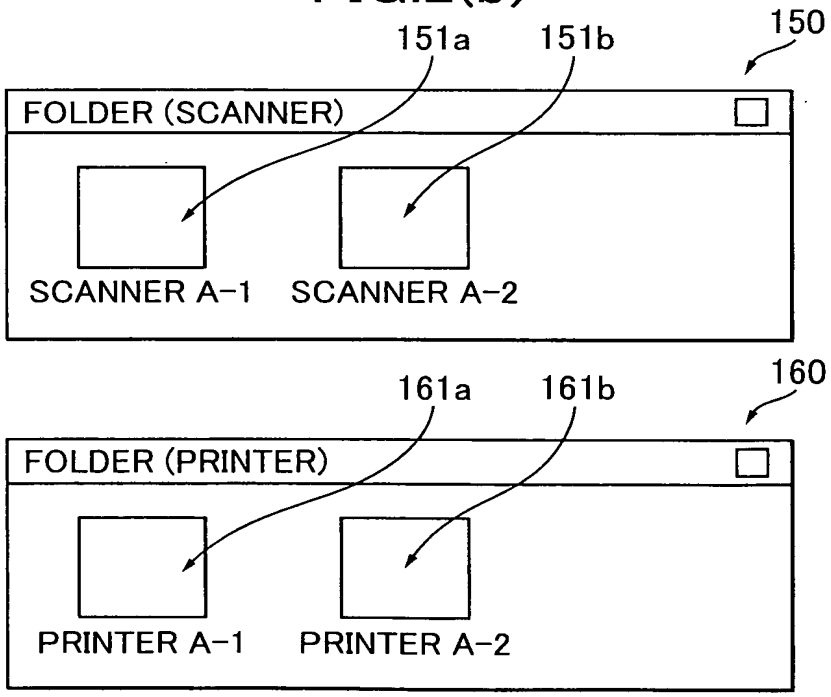
151a
151b
150
FOLDER (SCANNER)
SCANNER A-1
SCANNER A-2
161a
161b
160
FOLDER (PRINTER)
PRINTER A-1
PRINTER A-2

FIG.3

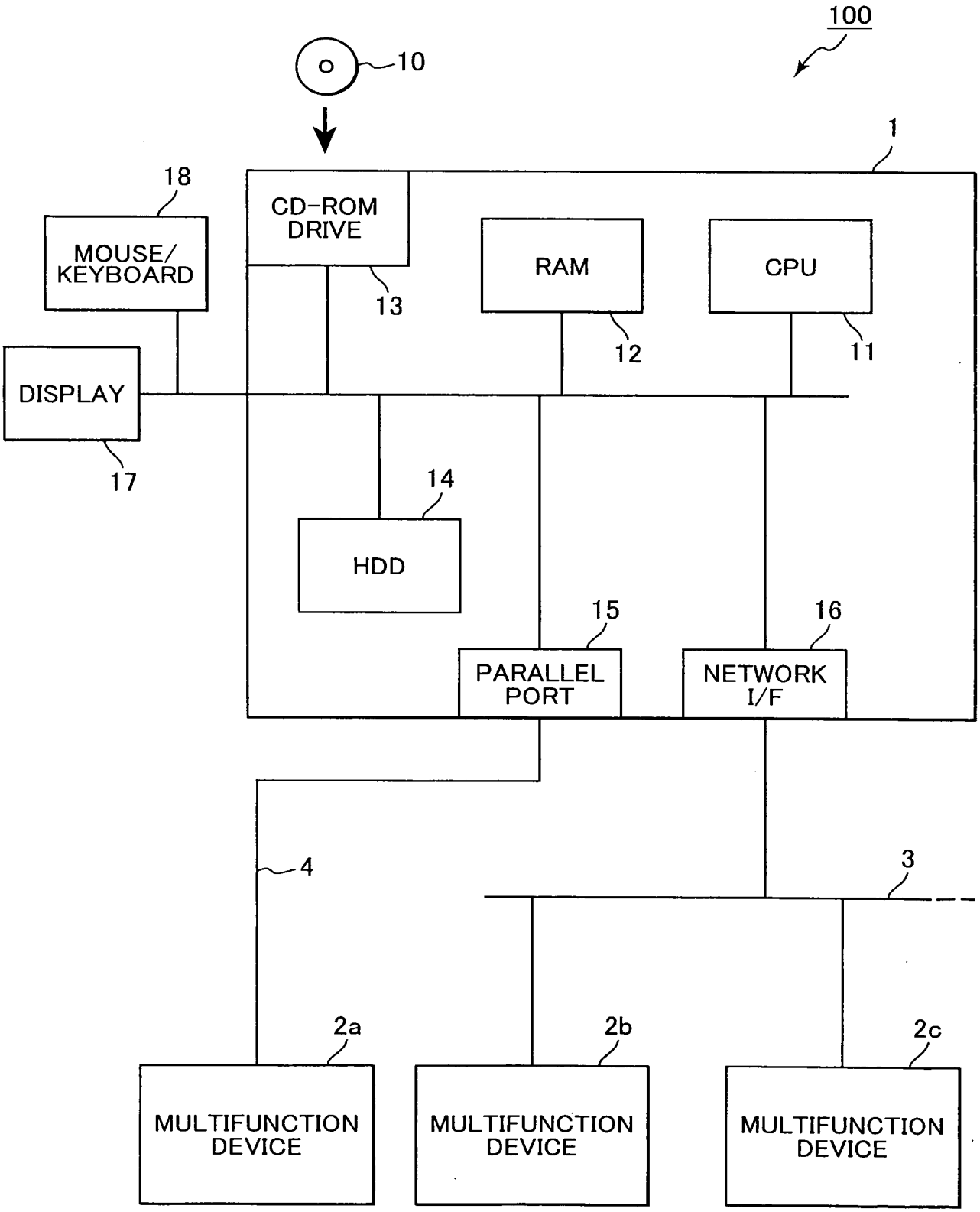
100
10
1
18
CD-ROM DRIVE
MOUSE/ KEYBOARD
RAM
CPU
13
12
11
DISPLAY
17
14
HDD
15
16
PARALLEL PORT
NETWORK I/F
4
3
2a
2b
2c
MULTIFUNCTION DEVICE
MULTIFUNCTION DEVICE
MULTIFUNCTION DEVICE

FIG.4

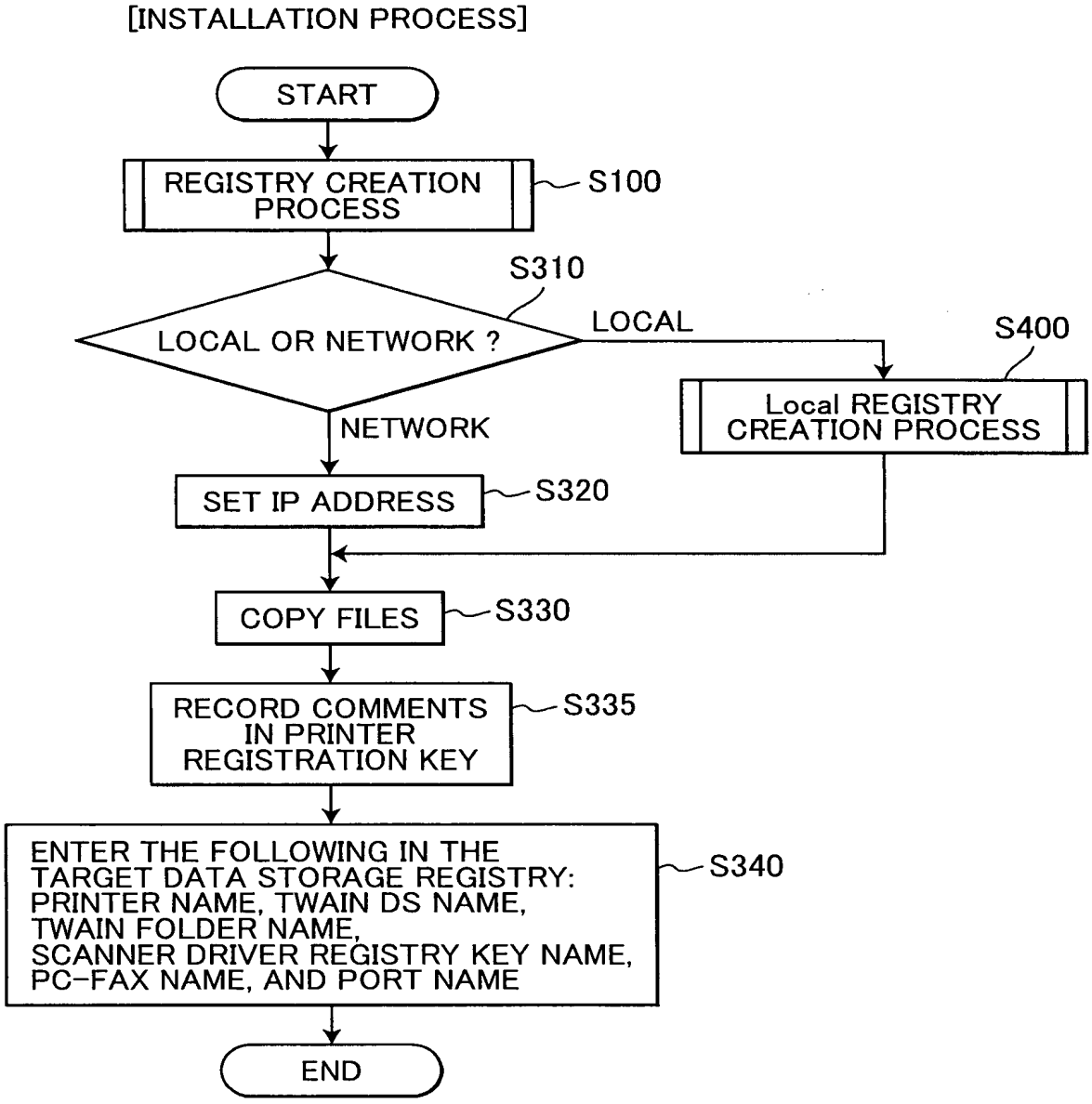
[INSTALLATION PROCESS]
START
REGISTRY CREATION PROCESS
S100
S310
LOCAL OR NETWORK ?
LOCAL
S400
Local REGISTRY CREATION PROCESS
NETWORK
SET IP ADDRESS
S320
COPY FILES
S330
RECORD COMMENTS IN PRINTER REGISTRATION KEY
S335
ENTER THE FOLLOWING IN THE TARGET DATA STORAGE REGISTRY: PRINTER NAME, TWAIN DS NAME, TWAIN FOLDER NAME, SCANNER DRIVER REGISTRY KEY NAME, PC-FAX NAME, AND PORT NAME
S340
END

FIG.5

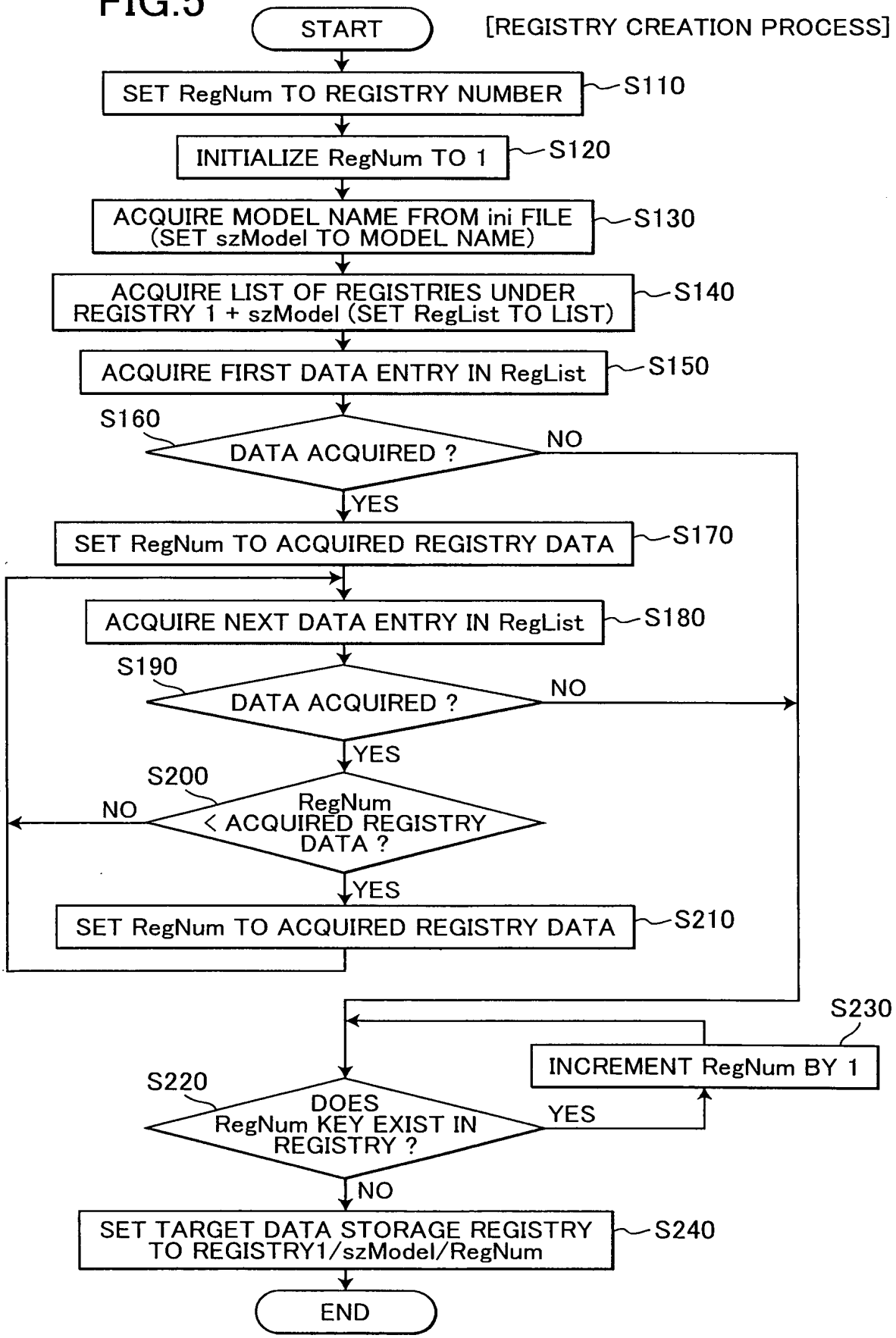
START
[REGISTRY CREATION PROCESS]
SET RegNum TO REGISTRY NUMBER
S110
INITIALIZE RegNum TO 1
S120
ACQUIRE MODEL NAME FROM ini FILE (SET szModel TO MODEL NAME)
S130
ACQUIRE LIST OF REGISTRIES UNDER REGISTRY 1 + szModel (SET RegList TO LIST)
S140
ACQUIRE FIRST DATA ENTRY IN RegList
S150
S160
DATA ACQUIRED ?
NO
YES
SET RegNum TO ACQUIRED REGISTRY DATA
S170
ACQUIRE NEXT DATA ENTRY IN RegList
S180
S190
DATA ACQUIRED ?
NO
YES
S200
NO
RegNum < ACQUIRED REGISTRY DATA ?
YES
SET RegNum TO ACQUIRED REGISTRY DATA
S210
S230
INCREMENT RegNum BY 1
S220
DOES RegNum KEY EXIST IN REGISTRY ?
YES
NO
SET TARGET DATA STORAGE REGISTRY TO REGISTRY1/szModel/RegNum
S240
END

FIG.6

[Local REGISTRY CREATION PROCESS]

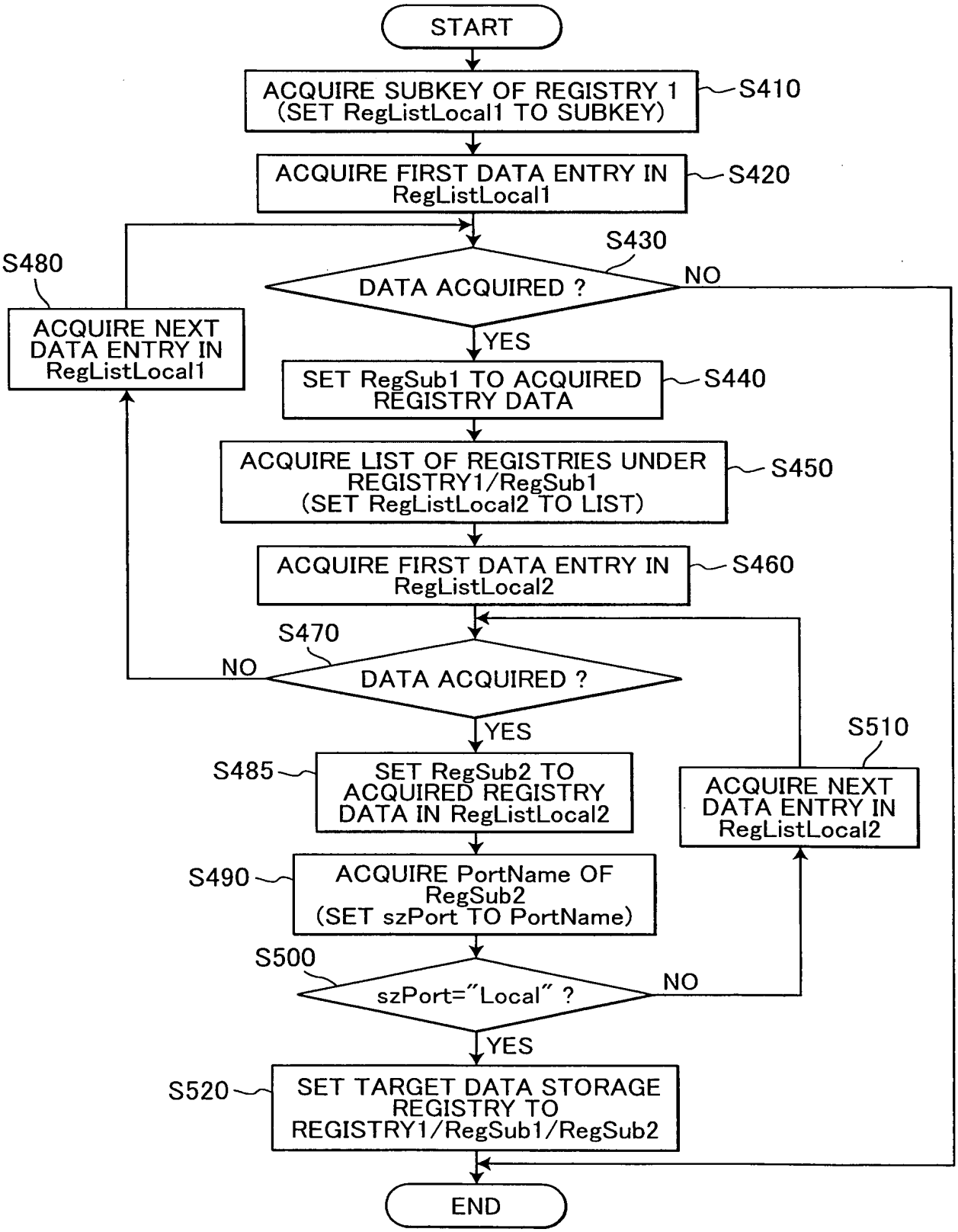

FIG.7

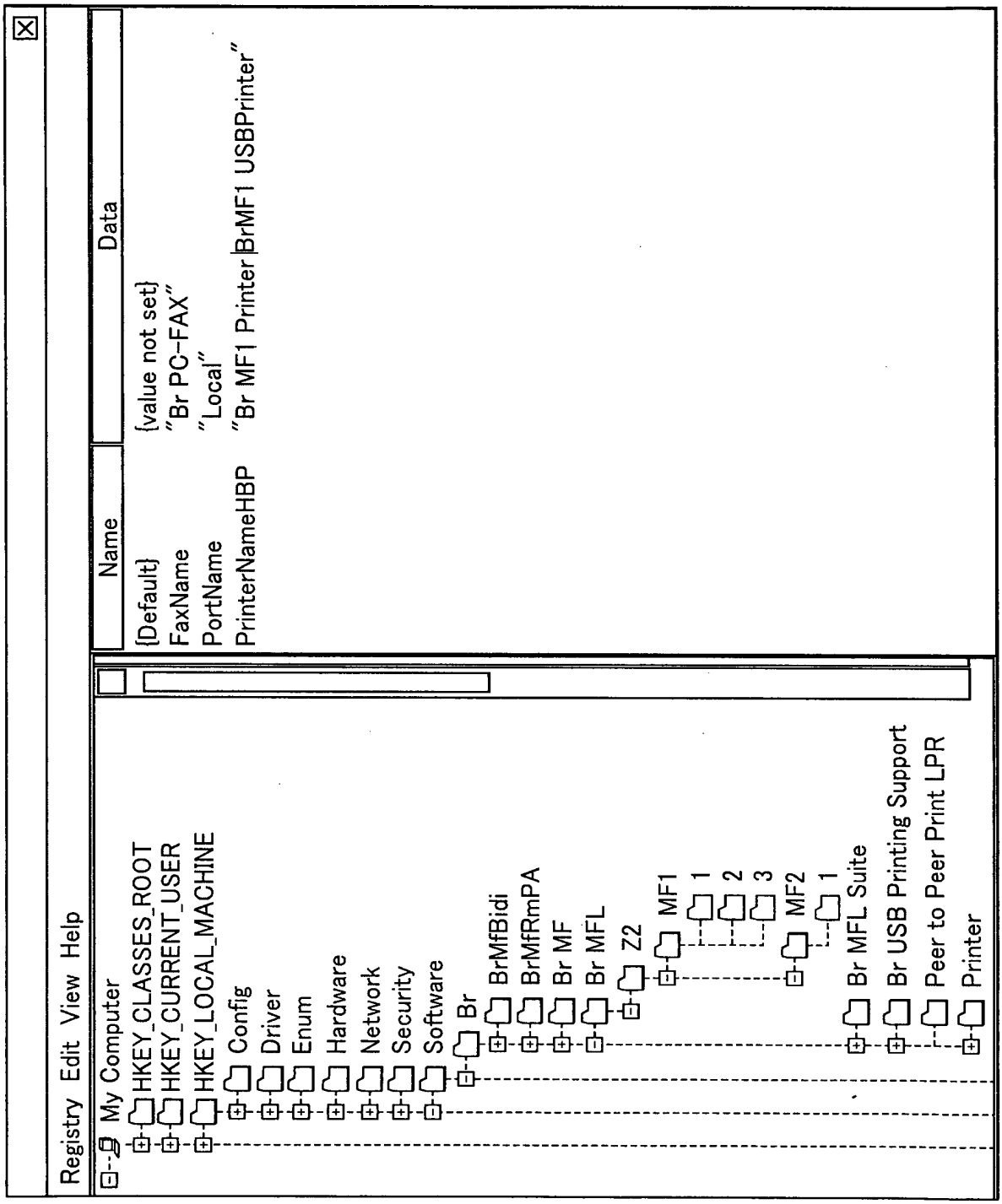
Registry Edit View Help
My Computer
HKEY_CLASSES_ROOT
HKEY_CURRENT_USER
HKEY_LOCAL_MACHINE
Config
Driver
Enum
Hardware
Network
Security
Software
Br
BrMfBidi
BrMfRmPA
Br MF
Br MFL
Z2
MF1
1
2
3
MF2
1
Br MFL Suite
Br USB Printing Support
Peer to Peer Print LPR
Printer
Name
Data
{Default}
{value not set}
FaxName
"Br PC-FAX"
PortName
"Local"
PrinterNameHBP
"Br MF1 Printer|BrMF1 USBPrinter"

FIG.8

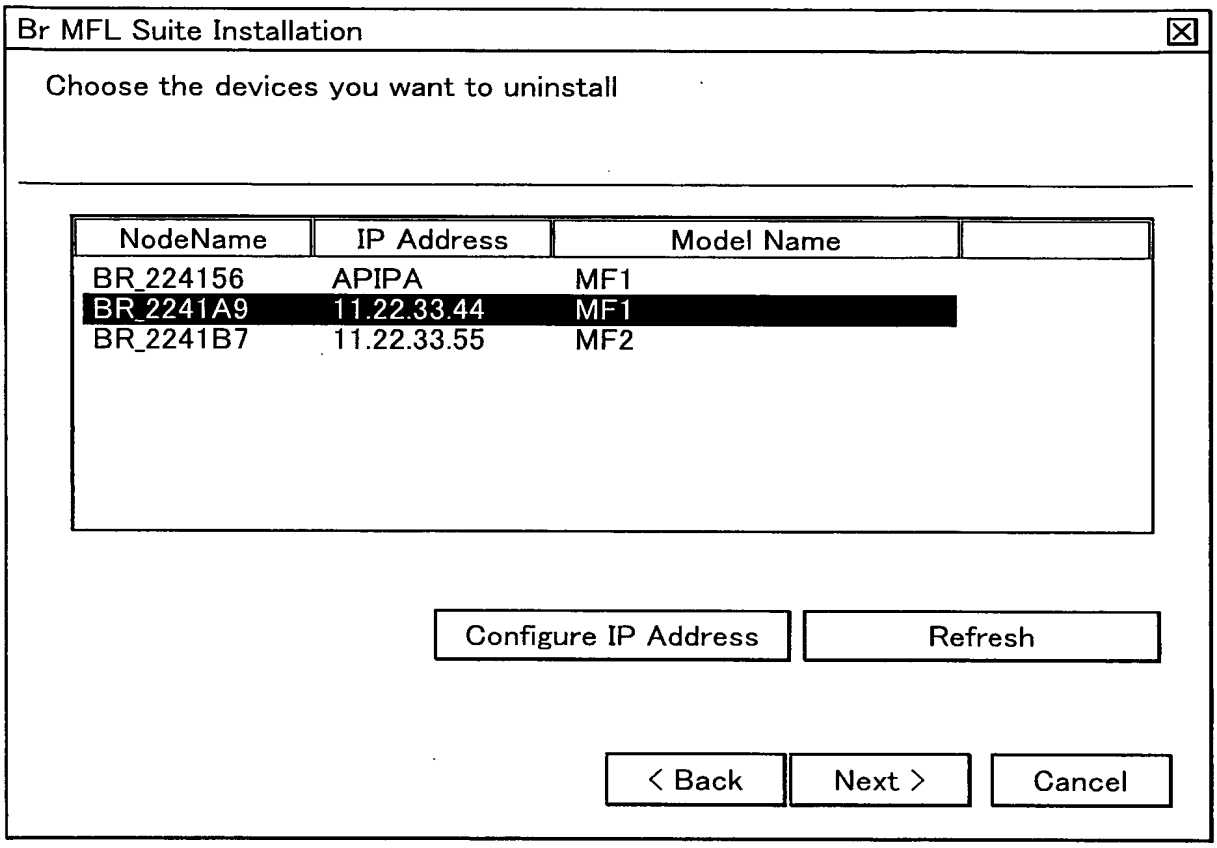

FIG.9

inf FILE

```
DRIVER TYPE Scan
MODEL NAME Br MF LAN
DRIVER FILE NAMES a.drv b.drv ···
REGISTRY ENTRY DATA A B C
 .
 .
 .
 .
PROCEDURE DATA
```

FIG.10(a)

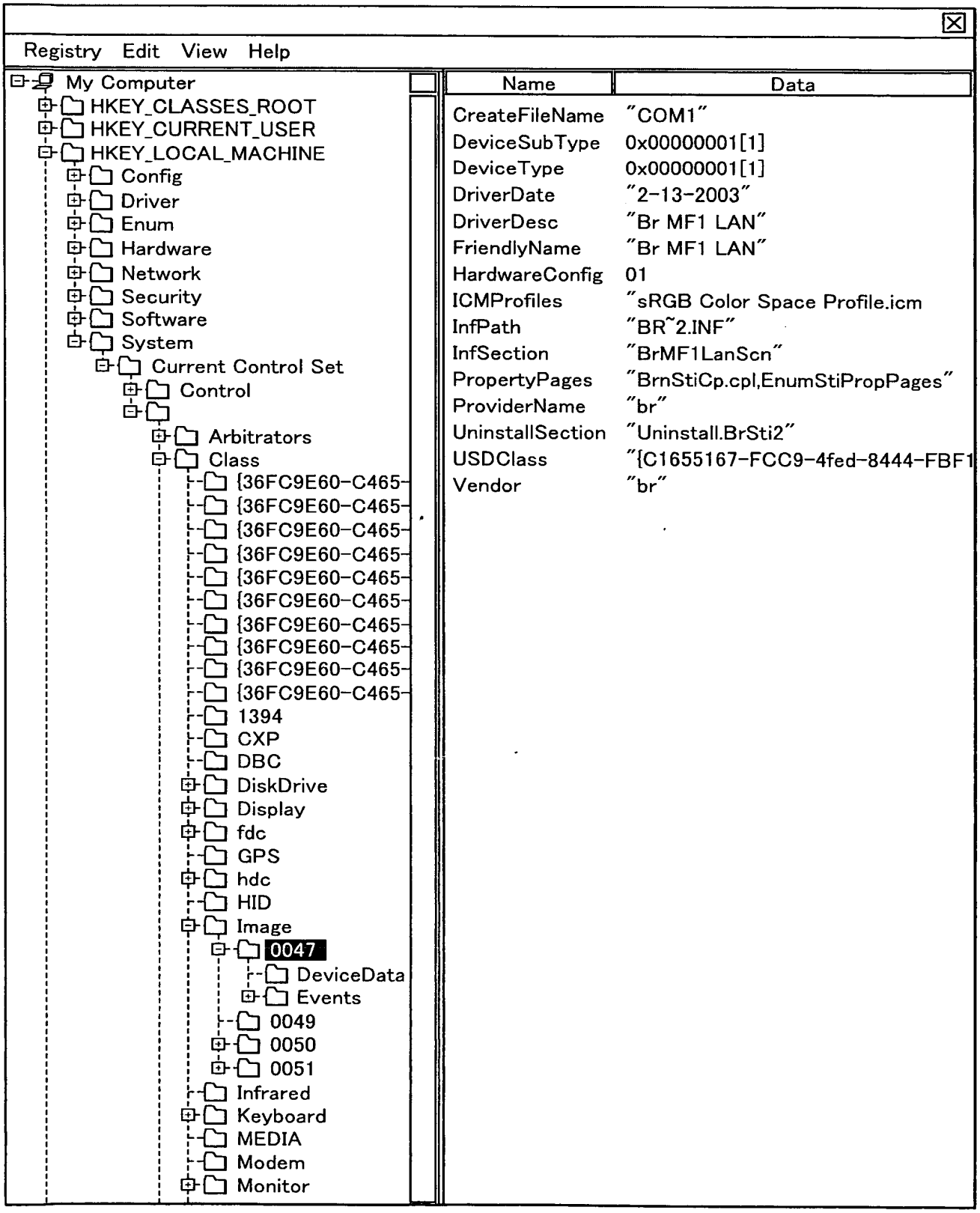
Registry Edit View Help
My Computer
HKEY_CLASSES_ROOT
HKEY_CURRENT_USER
HKEY_LOCAL_MACHINE
Config
Driver
Enum
Hardware
Network
Security
Software
System
Current Control Set
Control
Arbitrators
Class
{36FC9E60-C465-
{36FC9E60-C465-
{36FC9E60-C465-
{36FC9E60-C465-
{36FC9E60-C465-
{36FC9E60-C465-
{36FC9E60-C465-
{36FC9E60-C465-
{36FC9E60-C465-
{36FC9E60-C465-
1394
CXP
DBC
DiskDrive
Display
fdc
GPS
hdc
HID
Image
0047
DeviceData
Events
0049
0050
0051
Infrared
Keyboard
MEDIA
Modem
Monitor
Name
Data
CreateFileName "COM1"
DeviceSubType 0x00000001[1]
DeviceType 0x00000001[1]
DriverDate "2-13-2003"
DriverDesc "Br MF1 LAN"
FriendlyName "Br MF1 LAN"
HardwareConfig 01
ICMProfiles "sRGB Color Space Profile.icm
InfPath "BR~2.INF"
InfSection "BrMF1LanScn"
PropertyPages "BrnStiCp.cpl,EnumStiPropPages"
ProviderName "br"
UninstallSection "Uninstall.BrSti2"
USDClass "{C1655167-FCC9-4fed-8444-FBF1
Vendor "br"

FIG.10(b)

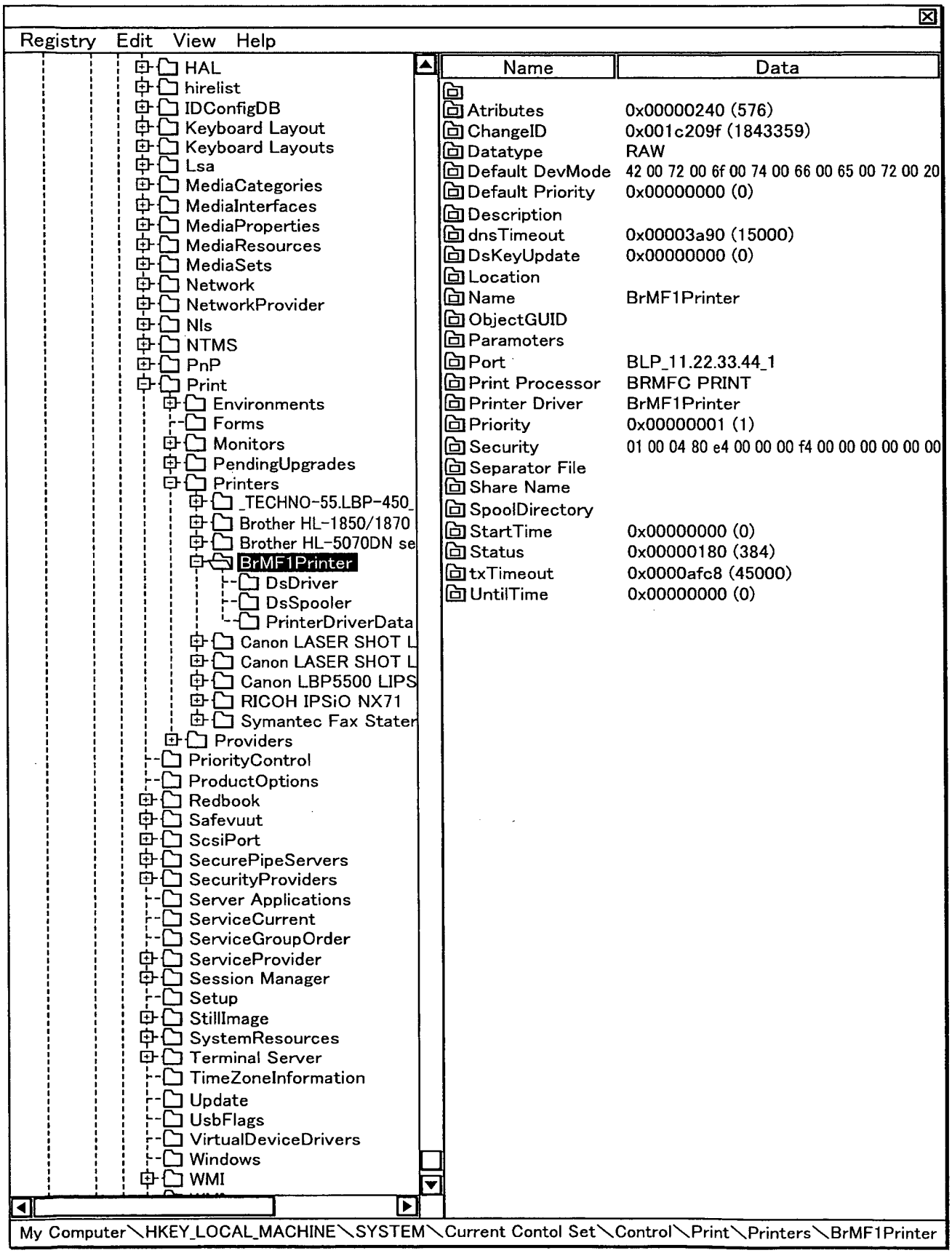
Registry Edit View Help
HAL
hirelist
IDConfigDB
Keyboard Layout
Keyboard Layouts
Lsa
MediaCategories
MediaInterfaces
MediaProperties
MediaResources
MediaSets
Network
NetworkProvider
Nls
NTMS
PnP
Print
Environments
Forms
Monitors
PendingUpgrades
Printers
TECHNO-55.LBP-450
Brother HL-1850/1870
Brother HL-5070DN se
BrMF1Printer
DsDriver
DsSpooler
PrinterDriverData
Canon LASER SHOT L
Canon LASER SHOT L
Canon LBP5500 LIPS
RICOH IPSiO NX71
Symantec Fax Stater
Providers
PriorityControl
ProductOptions
Redbook
Safevuut
ScsiPort
SecurePipeServers
SecurityProviders
Server Applications
ServiceCurrent
ServiceGroupOrder
ServiceProvider
Session Manager
Setup
StillImage
SystemResources
Terminal Server
TimeZoneInformation
Update
UsbFlags
VirtualDeviceDrivers
Windows
WMI
Name
Data
Atributes 0x00000240 (576)
ChangeID 0x001c209f (1843359)
Datatype RAW
Default DevMode 42 00 72 00 6f 00 74 00 66 00 65 00 72 00 20
Default Priority 0x00000000 (0)
Description
dnsTimeout 0x00003a90 (15000)
DsKeyUpdate 0x00000000 (0)
Location
Name BrMF1Printer
ObjectGUID
Paramoters
Port BLP_11.22.33.44_1
Print Processor BRMFC PRINT
Printer Driver BrMF1Printer
Priority 0x00000001 (1)
Security 01 00 04 80 e4 00 00 00 f4 00 00 00 00 00 00
Separator File
Share Name
SpoolDirectory
StartTime 0x00000000 (0)
Status 0x00000180 (384)
txTimeout 0x0000afc8 (45000)
UntilTime 0x00000000 (0)
My Computer\HKEY_LOCAL_MACHINE\SYSTEM\Current Contol Set\Control\Print\Printers\BrMF1Printer

FIG.11

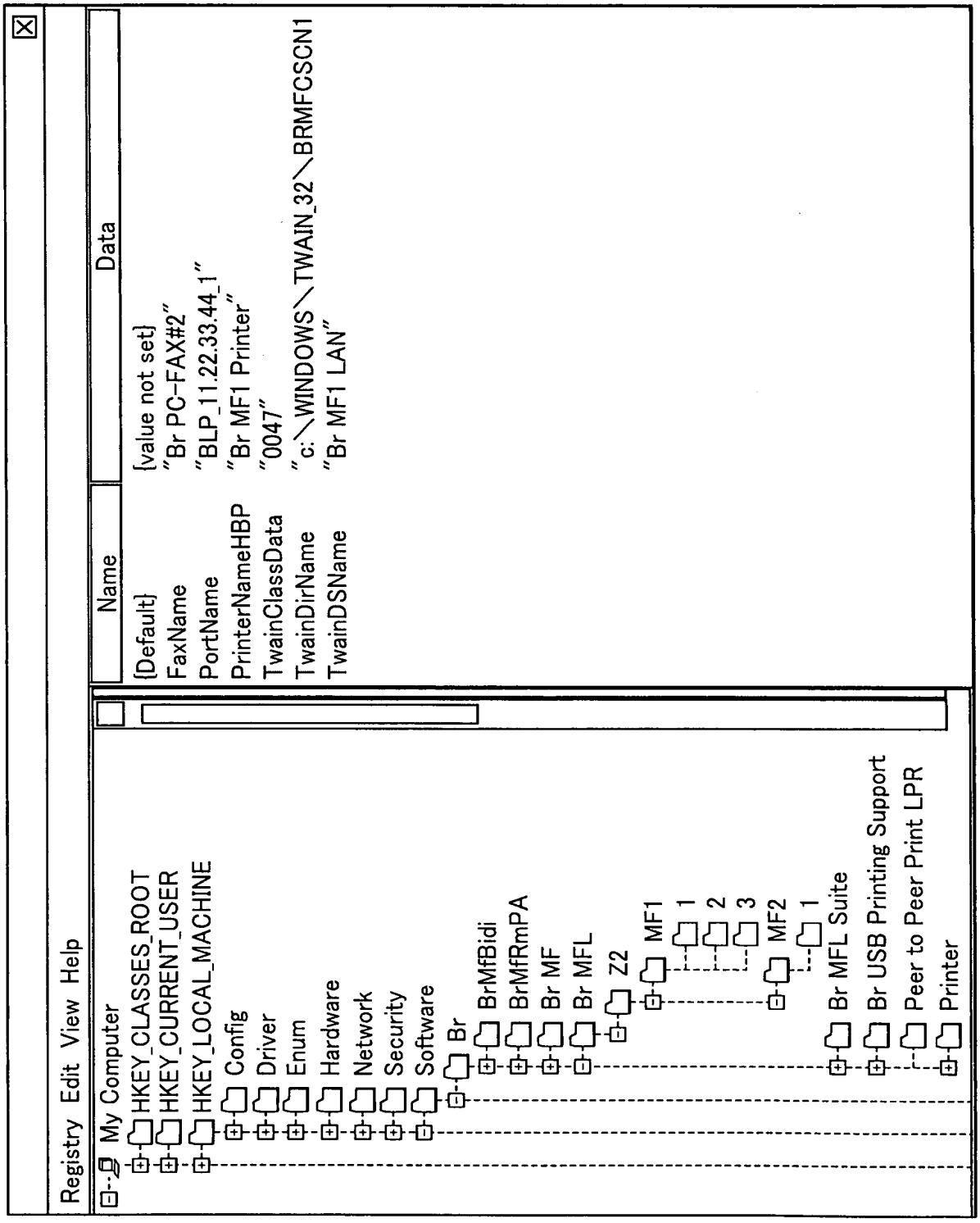
Registry Edit View Help
My Computer
HKEY_CLASSES_ROOT
HKEY_CURRENT_USER
HKEY_LOCAL_MACHINE
Config
Driver
Enum
Hardware
Network
Security
Software
Br
BrMfBidi
BrMfRmPA
Br MF
Br MFL
Z2
MF1
1
2
3
MF2
1
Br MFL Suite
Br USB Printing Support
Peer to Peer Print LPR
Printer
Name
Data
(Default)
(value not set)
FaxName
"Br PC-FAX#2"
PortName
"BLP_11.22.33.44_1"
PrinterNameHBP
"Br MF1 Printer"
TwainClassData
"0047"
TwainDirName
"c:\WINDOWS\TWAIN_32\BRMFCSCN1
TwainDSName
"Br MF1 LAN"

FIG.12

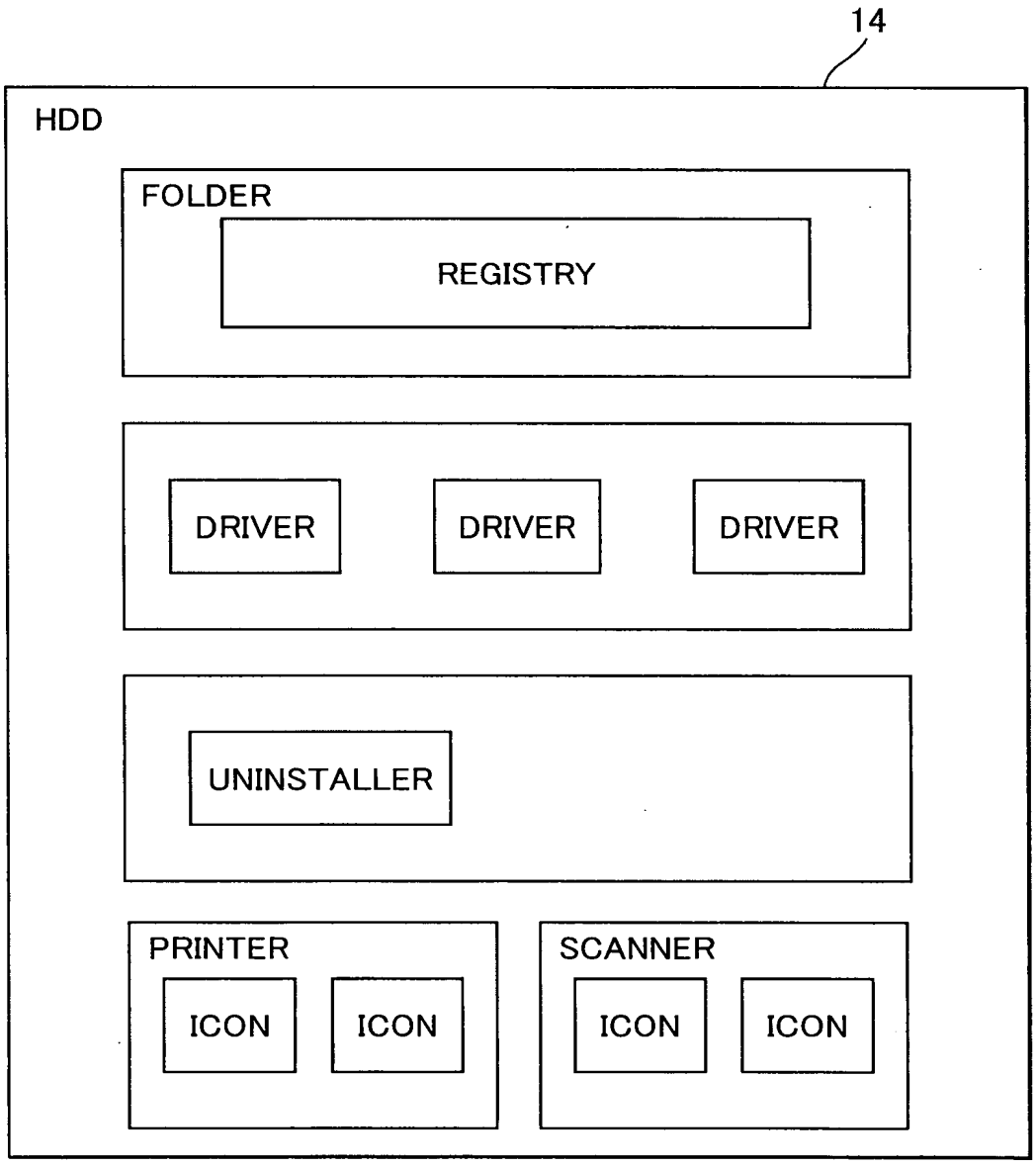
14
HDD
FOLDER
REGISTRY
DRIVER
DRIVER
DRIVER
UNINSTALLER
PRINTER
ICON
ICON
SCANNER
ICON
ICON

FIG.13

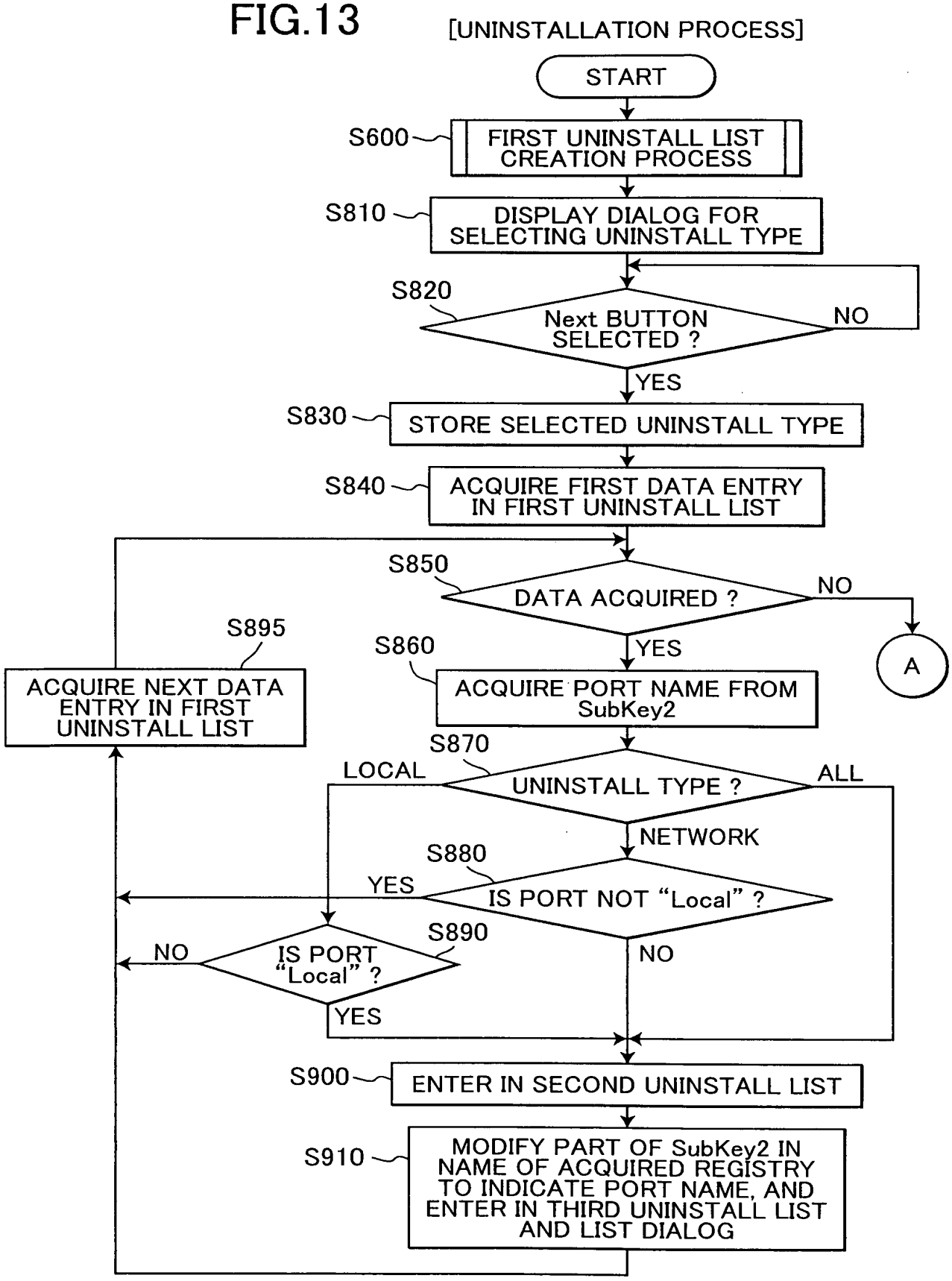
[UNINSTALLATION PROCESS]
START
S600
FIRST UNINSTALL LIST CREATION PROCESS
S810
DISPLAY DIALOG FOR SELECTING UNINSTALL TYPE
S820
Next BUTTON SELECTED ?
NO
YES
S830
STORE SELECTED UNINSTALL TYPE
S840
ACQUIRE FIRST DATA ENTRY IN FIRST UNINSTALL LIST
S850
DATA ACQUIRED ?
NO
YES
A
S860
ACQUIRE PORT NAME FROM SubKey2
S870
UNINSTALL TYPE ?
LOCAL
ALL
NETWORK
S880
IS PORT NOT "Local" ?
YES
NO
S890
IS PORT "Local" ?
NO
YES
S895
ACQUIRE NEXT DATA ENTRY IN FIRST UNINSTALL LIST
S900
ENTER IN SECOND UNINSTALL LIST
S910
MODIFY PART OF SubKey2 IN NAME OF ACQUIRED REGISTRY TO INDICATE PORT NAME, AND ENTER IN THIRD UNINSTALL LIST AND LIST DIALOG

FIG.14

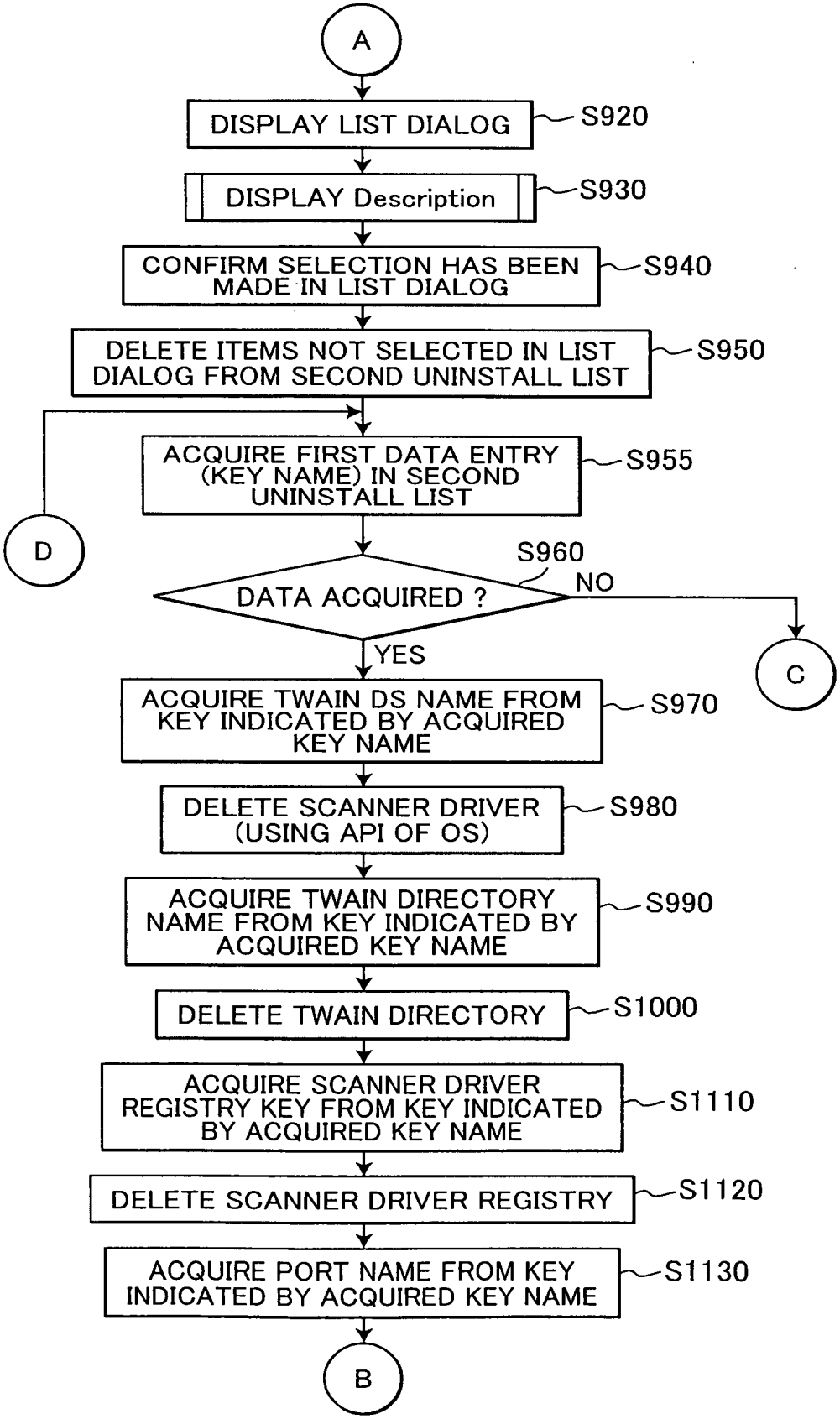
A
DISPLAY LIST DIALOG
S920
DISPLAY Description
S930
CONFIRM SELECTION HAS BEEN MADE IN LIST DIALOG
S940
DELETE ITEMS NOT SELECTED IN LIST DIALOG FROM SECOND UNINSTALL LIST
S950
ACQUIRE FIRST DATA ENTRY (KEY NAME) IN SECOND UNINSTALL LIST
S955
D
S960
DATA ACQUIRED ?
NO
YES
C
ACQUIRE TWAIN DS NAME FROM KEY INDICATED BY ACQUIRED KEY NAME
S970
DELETE SCANNER DRIVER (USING API OF OS)
S980
ACQUIRE TWAIN DIRECTORY NAME FROM KEY INDICATED BY ACQUIRED KEY NAME
S990
DELETE TWAIN DIRECTORY
S1000
ACQUIRE SCANNER DRIVER REGISTRY KEY FROM KEY INDICATED BY ACQUIRED KEY NAME
S1110
DELETE SCANNER DRIVER REGISTRY
S1120
ACQUIRE PORT NAME FROM KEY INDICATED BY ACQUIRED KEY NAME
S1130
B

FIG.15

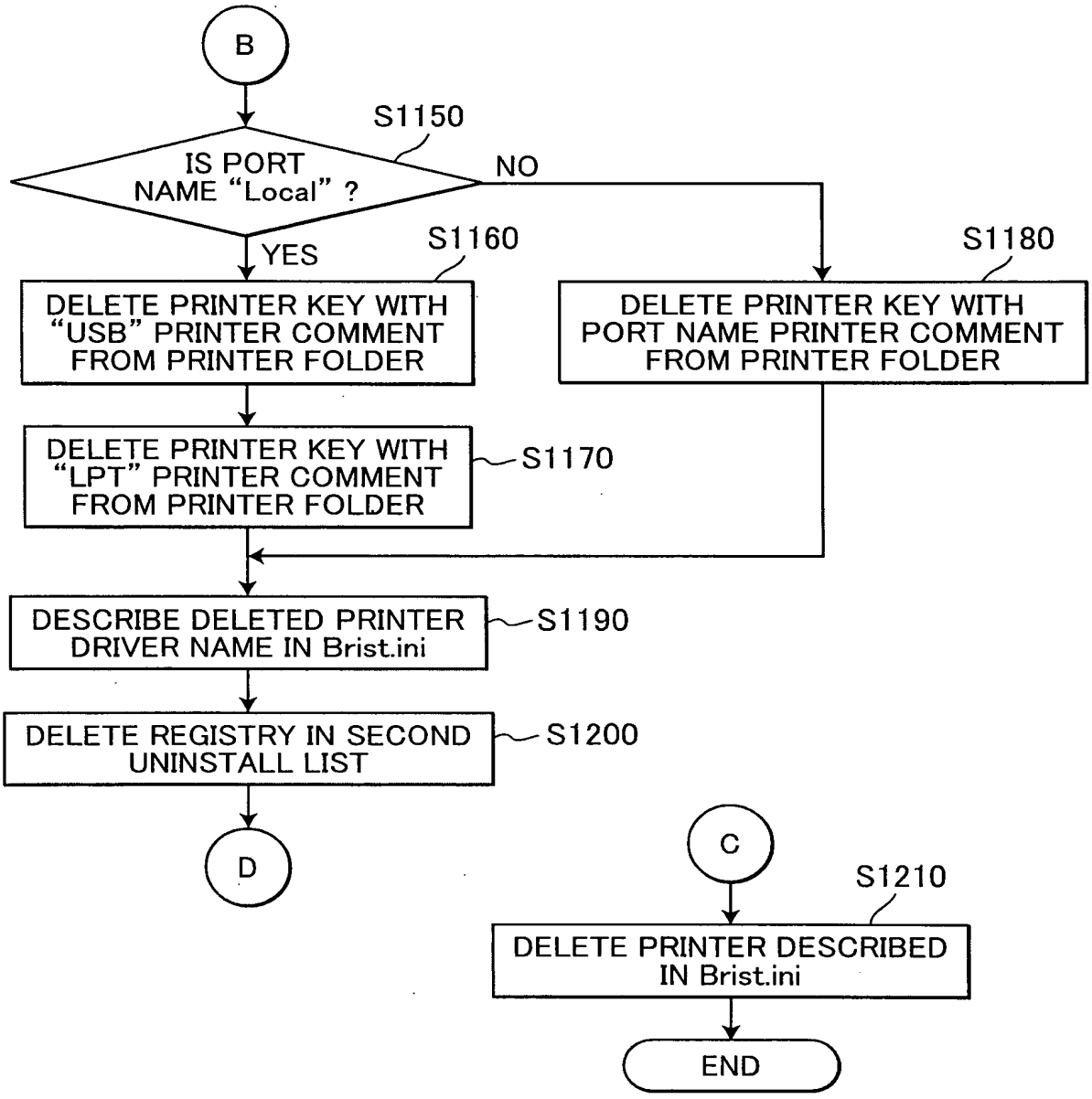
B
S1150
IS PORT NAME "Local" ?
NO
YES
S1160
DELETE PRINTER KEY WITH "USB" PRINTER COMMENT FROM PRINTER FOLDER
S1180
DELETE PRINTER KEY WITH PORT NAME PRINTER COMMENT FROM PRINTER FOLDER
DELETE PRINTER KEY WITH "LPT" PRINTER COMMENT FROM PRINTER FOLDER
S1170
DESCRIBE DELETED PRINTER DRIVER NAME IN Brist.ini
S1190
DELETE REGISTRY IN SECOND UNINSTALL LIST
S1200
D
C
S1210
DELETE PRINTER DESCRIBED IN Brist.ini
END

FIG.16(a)

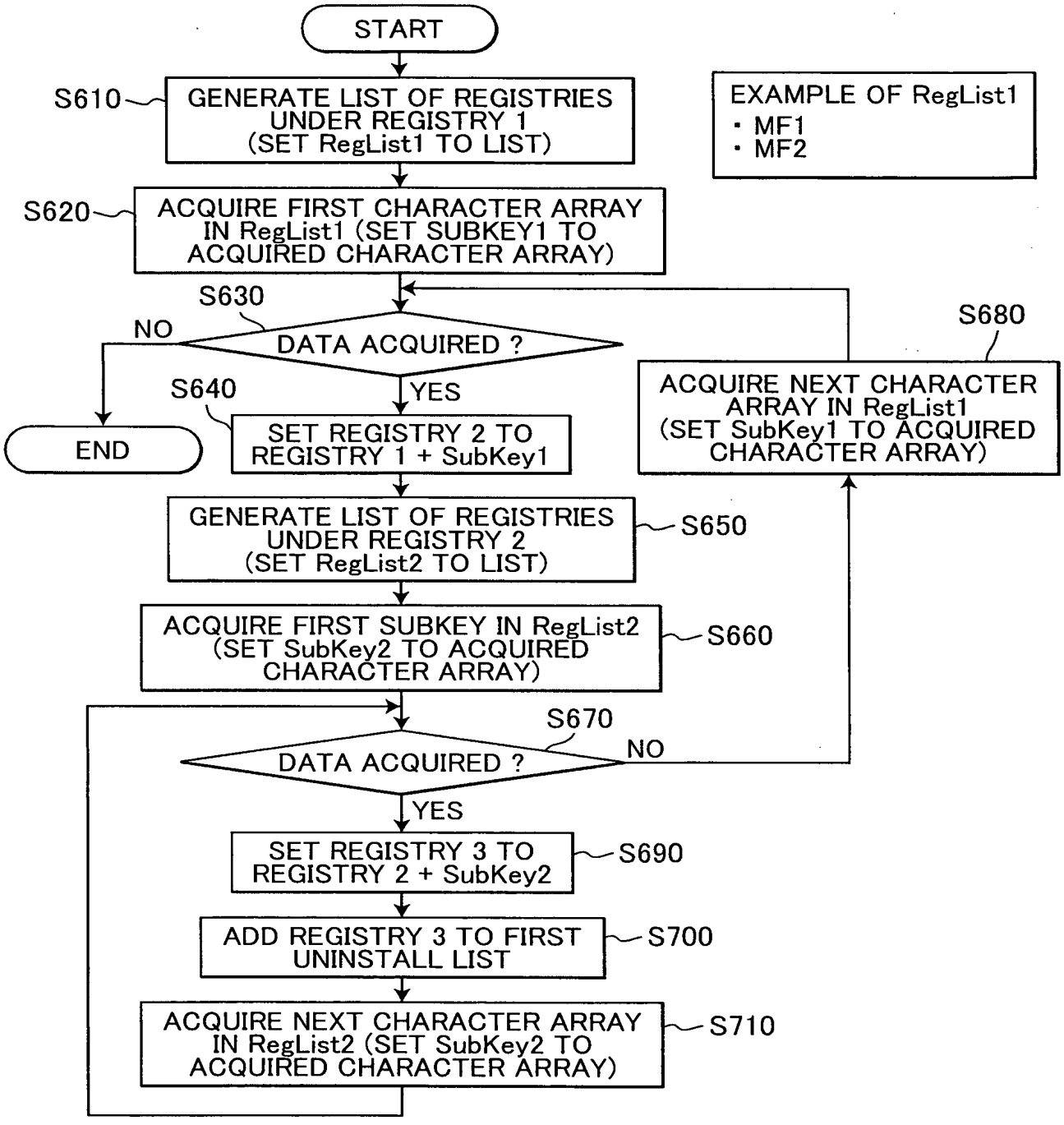

FIG.16(b)

REGISTRY 1
HKEY_LOCAL_MACHINE\Software\Br\Br MFL\Z2

REGISTRY 2
HKEY_LOCAL_MACHINE\Software\Br\Br MFL\Z2\MF1

REGISTRY 3
HKEY_LOCAL_MACHINE\Software\Br\Br MFL\Z2\MF1\1

FIG.17(a)

UNINSTALL LIST 1
HKEY_LOCAL_MACHINE\Software\Br\Br MFL\Z2\MF1\1
HKEY_LOCAL_MACHINE\Software\Br\Br MFL\Z2\MF1\2
HKEY_LOCAL_MACHINE\Software\Br\Br MFL\Z2\MF1\3
HKEY_LOCAL_MACHINE\Software\Br\Br MFL\Z2\MF2\1

FIG.17(b)

IF USER SELECTS "Local" AS UNINSTALL TYPE AND
THE ENTRY IN THE UNINSTALL LIST HAVING "Local" IS "2"

UNINSTALL LIST 2
HKEY_LOCAL_MACHINE\Software\Br\Br MFL\Z2\MF1\2

UNINSTALL LIST 3
HKEY_LOCAL_MACHINE\Software\Br\Br MFL\Z2\MF1\Local

FIG.17(c)

IF "ALL" IS SELECTED AS THE UNINSTALL TYPE

UNINSTALL LIST 2
HKEY_LOCAL_MACHINE\Software\Br\Br MFL\Z2\MF1\1
HKEY_LOCAL_MACHINE\Software\Br\Br MFL\Z2\MF1\2
HKEY_LOCAL_MACHINE\Software\Br\Br MFL\Z2\MF1\3
HKEY_LOCAL_MACHINE\Software\Br\Br MFL\Z2\MF2\1

UNINSTALL LIST 3
HKEY_LOCAL_MACHINE\Software\Br\Br MFL\Z2\MF1\Local
HKEY_LOCAL_MACHINE\Software\Br\Br MFL\Z2\MF1\BLP_11.22.33.44_1
HKEY_LOCAL_MACHINE\Software\Br\Br MFL\Z2\MF1\BLP_11.22.33.45_1
HKEY_LOCAL_MACHINE\Software\Br\Br MFL\Z2\MF2\BLP_11.22.33.55_1

FIG.18

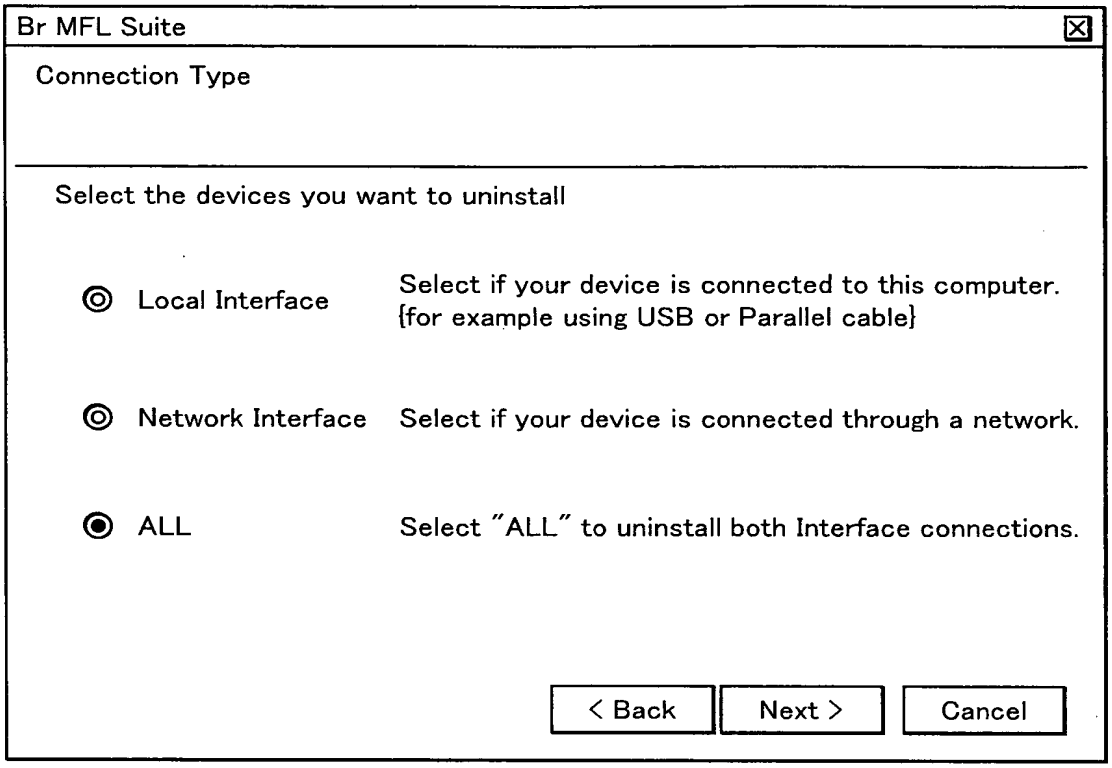
Br MFL Suite
Connection Type
Select the devices you want to uninstall
Local Interface
Select if your device is connected to this computer. (for example using USB or Parallel cable)
Network Interface
Select if your device is connected through a network.
ALL
Select "ALL" to uninstall both Interface connections.
< Back
Next >
Cancel

FIG.19

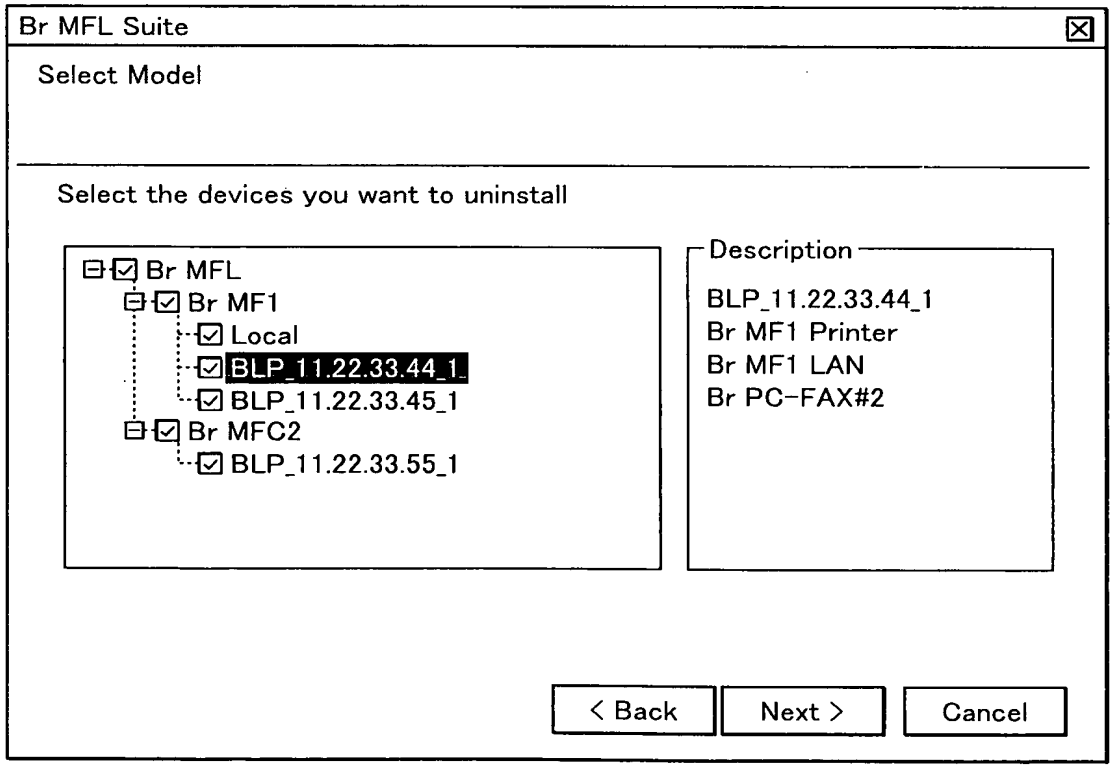
Br MFL Suite
Select Model
Select the devices you want to uninstall
Br MFL
Br MF1
Local
BLP_11.22.33.44_1
BLP_11.22.33.45_1
Br MFC2
BLP_11.22.33.55_1
Description
BLP_11.22.33.44_1
Br MF1 Printer
Br MF1 LAN
Br PC-FAX#2
< Back
Next >
Cancel

FIG.20

[Description DISPLAY PROCESS]

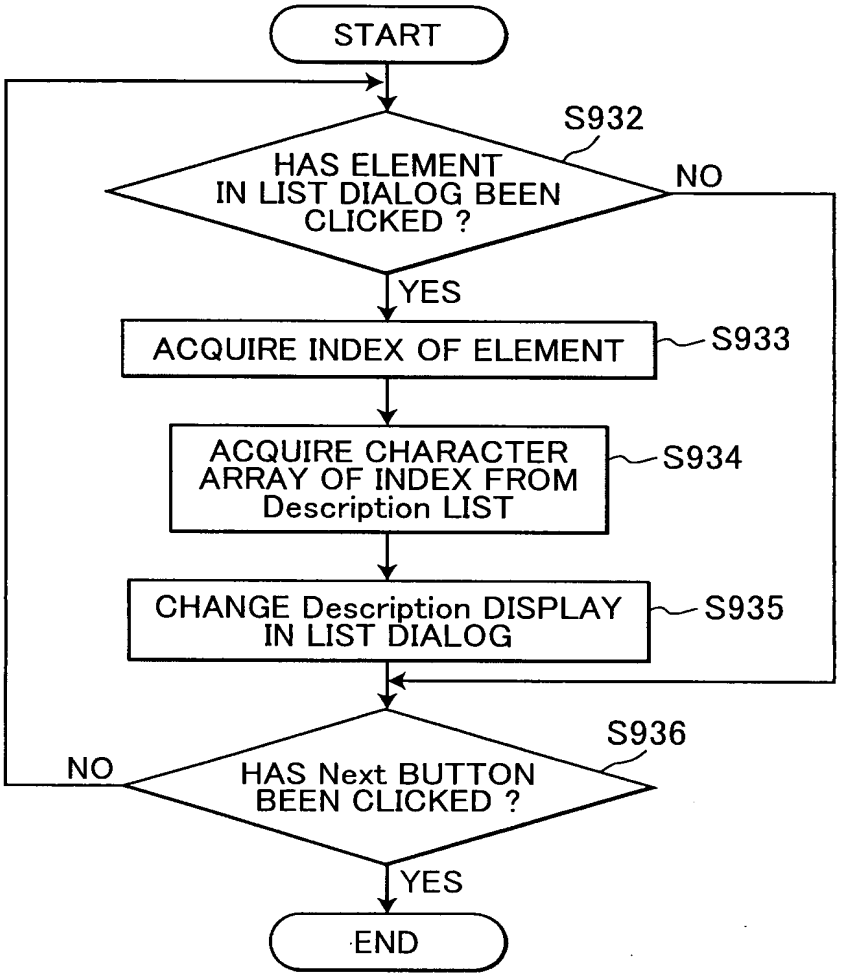

FIG.21

BrIst.ini

```
[Printer Driver]
1=Br MF-8420 Printer
2=Br PC-FAX
```